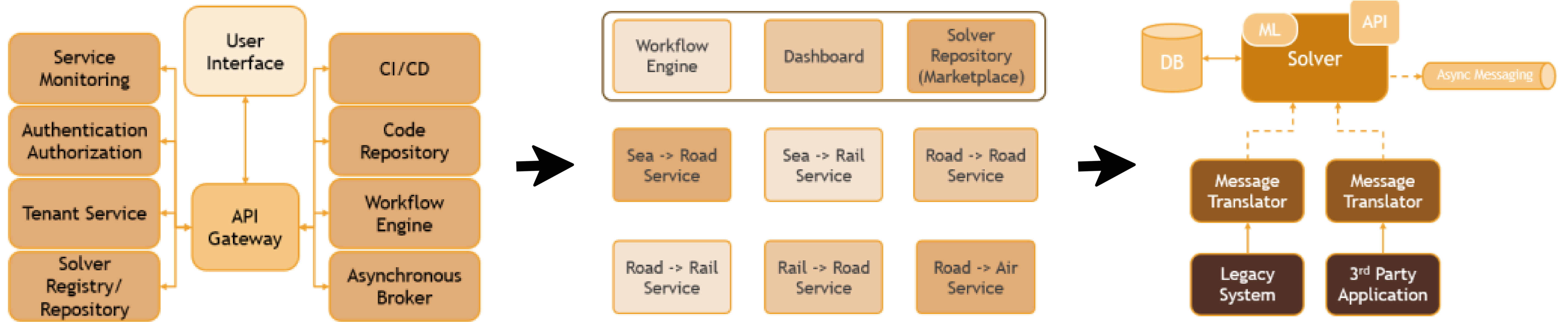


FOR-FREIGHT aims to maximise the utilisation of multimodal freight transport capacity, achieve competitive sustainability with higher levels of efficiency, and reduce the average cost of freight transport through the development of novel solutions and their integration with legacy logistics systems. This will enable more effective and sustainable management of goods and freight flows in airports, ports, inland terminals and various logistics nodes, considering the requirements of all involved stakeholders and accounting for economic, environmental and social aspects. The FOR-FREIGHT solutions will target the end-to-end optimisation of multimodal/multi-stakeholder logistics processes and improved access to transshipment services through the following Unique Value Propositions: (a) Real-time, Door-to-Door Tracking, (b) Decision Support Systems (DSS), (c) Increased Resilience & Security, and (d) Carbon Footprint Assessment & Transport Networks.

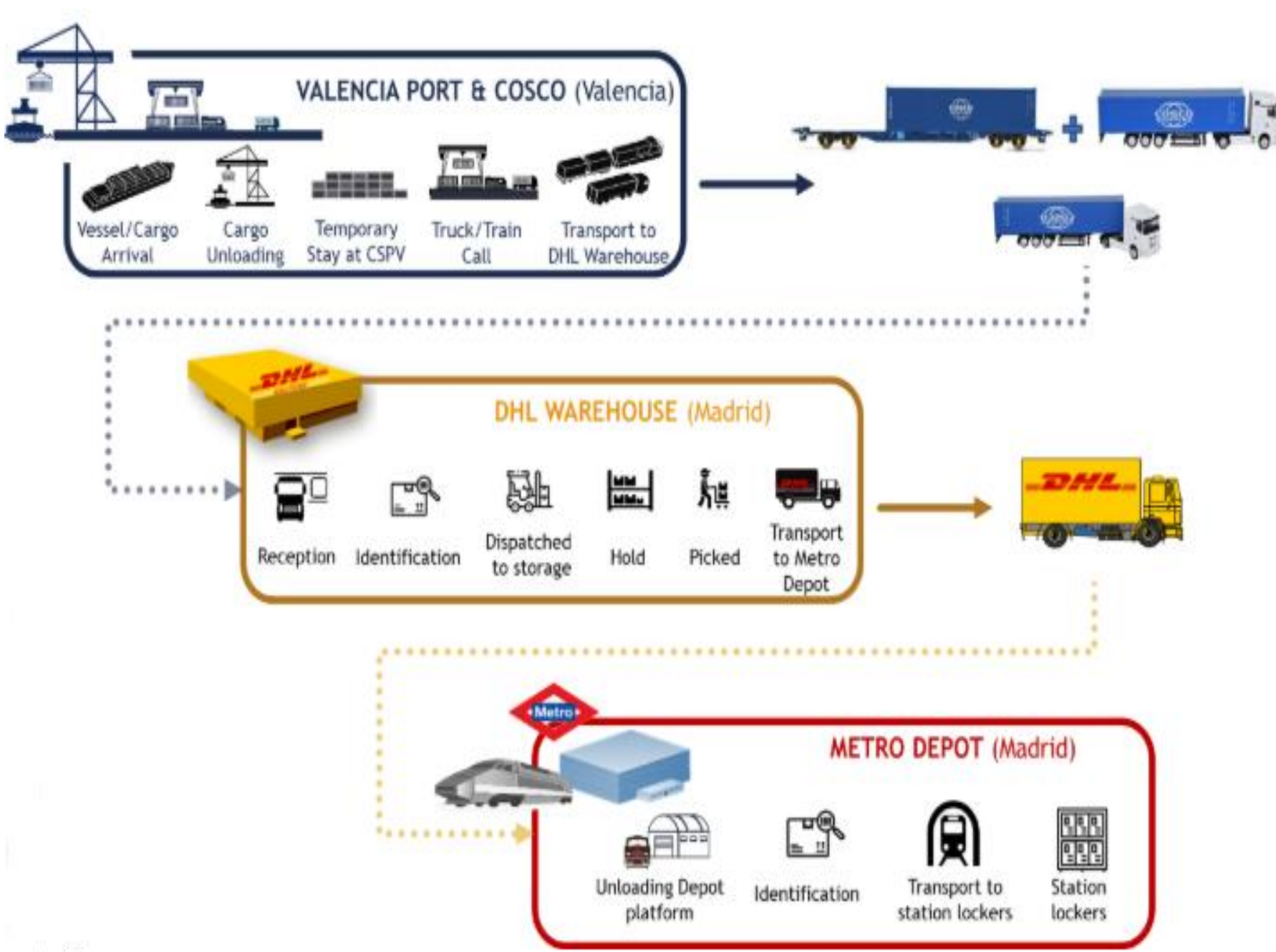


## FOR-FREIGHT innovation aspects:

- **Comprehensive technology-driven solvers library:** Responds to different technological and infrastructure maturity, monitors, and predicts CO<sub>2</sub> footprint, costs, capacities, etc.
- **“Community” Platform:** Consumes local innovation and technology advancements of different ecosystems and works as a unique pipeline of solvers and data sources to provide solutions to real-world operational cases.
- **Setting a “common ground” for logistics communication:** Expands TIC4.0’s common language to hinterland actors (warehouse, dry port, airport, land transport).
- **Last-mile distribution systems in intermodal interfaces:** Utilizes a Subway-Based Network as a sustainable alternative for last-mile distribution and offers new capacities and efficient interfaces.
- **Cutting-edge Technology integration:** Digital Twins as a decision-support system and simulation tool, IoT sensors for real-time tracking, and Blockchain technology.

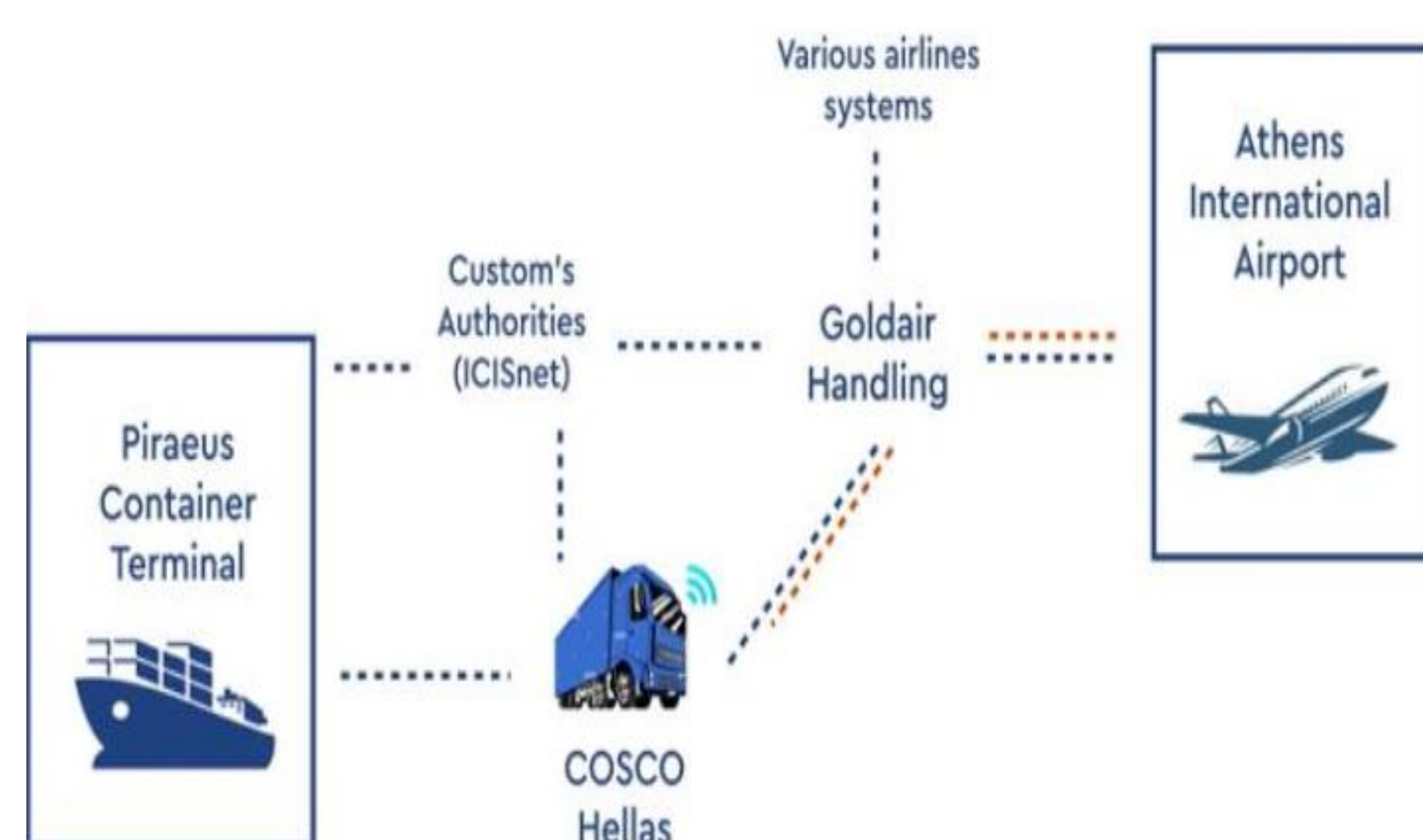
## The project’s UCs are:

1. **UC1 (Spain):** Blockchain & Digital Twins to support Decision Making Process in multimodal transport combined with a Subway-Based Network for sustainable last-mile distribution.
2. **UC2 (Greece):** Port-to-Airport multimodal freight transport: End-to-end optimization with DSS and real-time monitoring & control capabilities.
3. **UC3 (Romania):** Riverport to warehouse hub via railway network - Galati Port.



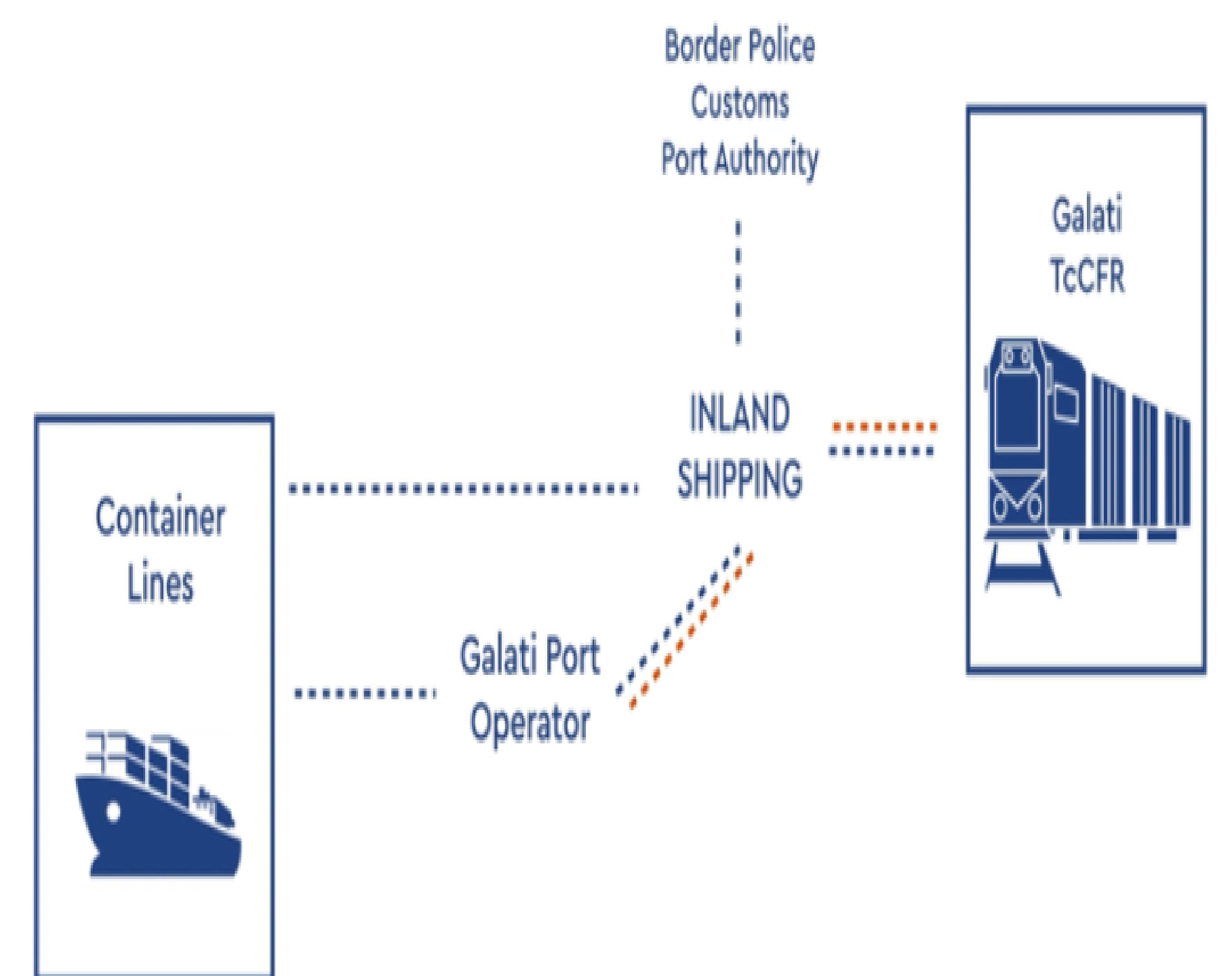
## Spanish Use Case Goals:

1. Improve information flow and visibility
2. Improve truck planning and truck staying at the port and terminal
3. Reduce traffic congestion at the port
4. Faster distributions through the existing nodes
5. Use a more efficient and sustainable transport mode in the last mile distribution – METRO.



## Greek Use Case Goals:

1. Prioritization of interoperability, efficiency, and seamless connectivity among different actors
2. Reduce the increased multimodal costs and CO<sub>2</sub> emissions
3. Optimize inventory management systems
4. Introduce innovative features to enhance logistics operations.



## Romanian Use Case Goals:

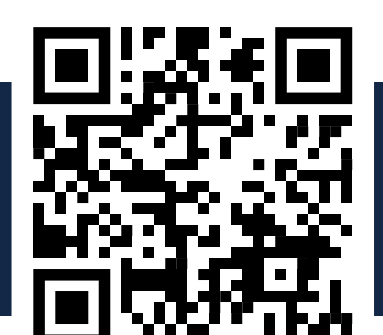
1. Enhance remote monitoring capabilities for logistics operators and users (tracking)
2. Smooth functioning in the port area connecting the whole ecosystem
3. Automation of processes that are now manually executed
4. Reduced GHG emissions based on carbon footprint analysis.



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The FOR-FREIGHT project has received funding from Horizon Europe, under Grant Agreement No. 101069731.